

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Mitchell Weiss, et al.

Application No.

10/824,448

Attorney Docket No.

3460-CH-0189

Filed:

April 14, 2004

For:

ALPHA-HEMOGLOBIN STABILIZING PROTEIN TRANSGENIC MOUSE AND METHODS OF USE

**THEREOF** 

Examiner:

Not Yet Assigned

Group Art Unit:

Not Yet Assigned

## CERTIFICATE OF MAILING UNDER 37 C.F.R § 1.8(a)

I hereby certify that this Correspondence is being deposited on the date identified below with the United States Postal Service as first-class mail in an envelope properly addressed to COMMISSIONER FOR PATENTS, P.O. Box 1450, Alexandria, VA 22313-1450.

8-26-04
Date of Certificate

Janice Makelinger

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

## INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97

In compliance with the duty of disclosure set forth in 37 C.F.R. § 1.56, Applicants are submitting herewith a Form PTO-1449 and a copy of the references listed thereon. This Information Disclosure Statement is being filed within three months of the filing date. Thus, it is believed by the undersigned attorney that no fee is required under 37 C.F.R. §1.97(b).

In the event that a fee is required, the Commissioner is authorized to charge Deposit Account No. 04-1406 of the undersigned attorneys. A duplicate copy of this sheet is enclosed.

In the opinion of the undersigned, the references submitted herewith are the

most pertinent of which the undersigned is aware. However, no representation is made or intended that more pertinent references do not exist.

This submission is not an admission that the references listed on the attached Form PTO-1449 constitute prior art against the claims of this application.

The Examiner is respectfully requested to confirm receipt and consideration of the cited references by initialing and returning a copy of the attached Form PTO-1449 in accordance with MPEP §609.

Early and favorable consideration of this application is respectfully requested.

Respectfully submitted,

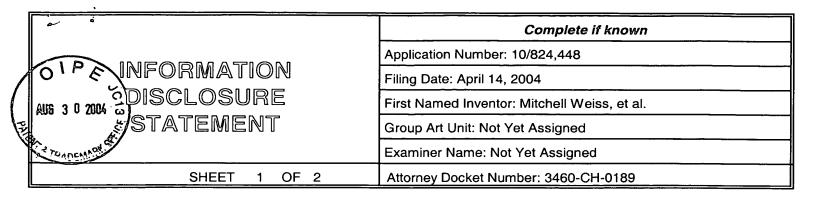
DANN, DORFMAN, HERRELL & SKILLMAN A Professional Corporation Attorneys for Applicant(s)

Kathleen D. Rigaut, Ph.D., J.D. PTO Registration No. 43,047

Telephone: (215) 563-4100 Facsimile: (215) 563-4044 Customer No. 000110

Enclosures - Form PTO-1449

Copies of references listed on PTO - 1449



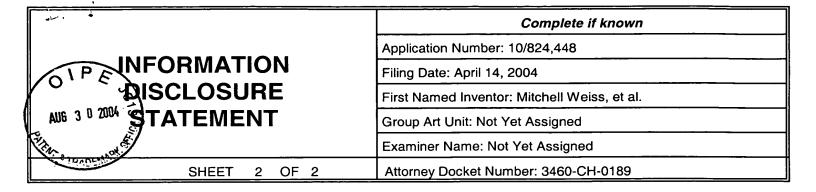
UNITED STATES PATENT DOCUMENTS				
EXAMINER'S INITIALS	CITE NO.	PATENT NUMBER	ISSUE DATE MM-DD-YYYY	FIRST NAMED INVENTOR
	A1	5,252,479	10-12-1993	Arun Srivastava

FOREIGN PATENT DOCUMENTS					
EXAMINER'S INITIALS	CITE NO.	DOCUMENT NUMBER	COUNTRY OR REGION	DATE OF PUBLICATION MM-DD-YYYY	FIRST NAMED INVENTOR OR APPLICANT
	B1	WO 93/07282	wo	04-15-1993	Boehringer Ingelheim International

OTHER PRIOR ART - NON-PATENT DOCUMENTS				
EXAMINER'S INITIALS	CITE NO.	Include name of the author (in Capital Letters), title of the article (when appropriate), title of the item(book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published		
·	C1	KIHM, A.J. et al. "An abundant erythroid protein that stabilizes free $\alpha$ -haemoglobin"; Nature, 417: 758-763 (2002)		
	C2	MIELE, G. et al. "A novel erythroid-specific marker of transmissible spongiform encephalopathies"; Nature Medicine, 7(3): 361-364 (2001)		
	СЗ	SCOTT, M.D. et al. "Entrapment of Purified α-Hemoglobin Chains in Normal Erythrocytes"; The Journal of Biological Chemistry, 265(29): 17953-17959 (1990)		
	C4	GELL, D. et al. "Biophysical Characterization of the α-Hemoglobin Stabilizing Protein"; The Journal of Biological Chemistry, 277(43): 40602-40609 (2002)		
	C5	YANG, B. et al. "A mouse model for $\beta$ -thalassemia"; Proc. Natl. Acad. Sci. USA, 92: 11608-11612 (1995)		
	C6	CIAVATTA, D.J. et al. "Mouse model of human $\beta^0$ -thalassemia: Targeted deletion of the mouse $\beta^{\text{nai}}$ - and $\beta^{\text{nin}}$ -globin genes in embryonic stem cells"; Proc. Natl. Acad. Sci. USA, 92: 9259-9263 (1995)		
	C7	POOTRAKUL, P. et al. "A correlation of eythrokinetics, ineffective erythropoiesis, and erythroid precursor apoptosis in Thai patients with thalassemia"; Blood, 96(7): 2606-2612 (2000)		
		CENTIS, F. et al. "The importance of erythroid expansion in determining the extent of apoptosis in erythroid precursors in patients with β-thalassemia major"; Blood, 96(10): 3624-3629 (2000)		

EXAMINER'S	DATE
SIGNATURE	CONSIDERED

**EXAMINER**: Initial if reference considered, whether or not citation is in conformance with MPEP §609. Draw a line through citation if citation not in conformance and reference not considered. Include a copy of this form with next communication to applicant.



	C9	PARIZEK, P. et al. "Similar Turnover and Shedding of the Cellular Prion Protein in Primary Lymphoid and Neuronal Cells"; The Journal of Biological Chemistry, 276(48): 44627-44632 (2001)
	C10	THACKRAY, A.M. et al. "Chronic Subclinical Prior Disease Induced by Low-Dose Inoculum"; Journal of Virology, 76(5): 2510-2517 (2002)
	C11	YUAN, J. et al. "Accelerated Programmed Cell Death (Apoptosis) in Erythroid Precursors of Patients With Severe $\beta$ -Thalassemia (Cooley's Anemia)"; Blood, 82(2): 374-377 (1993)
	C12	YUAN, J. et al. "The Instability of the Membrane Skeleton in Thalassemic Red Blood Cells"; Blood, 86(10): 3945-3950 (1995)
	C13	FAHRENKRUG, S.C. et al. "Porcine gene discovery by normalized cDNA-library sequencing and EST cluster assembly"; GenBank Accession No. AW480086
	C14	"Rattus Norvegicus"; GenBank Accession No. XM_215059
	C15	FINNING, K. et al. "Homo Sapien"; GenBank Accession No. AF485325
	C16	MIELE, G. et al. "Bos taurus"; GenBank Accession No. AF485326
	C17	MIELE, G. et al. "Mus musculus"; GenBank Accession No. AF485327
	C18	Roslin Institute, Edinburgh (2001) Annual Report 00-01, 1-64
	C19	HOFFMAN-FEZER, G. et al. "Biotin labelling as an alternative nonradioactive approach to determination of red cell survival"; Ann Hematol., 67(2): 81-7 (1993)
,	C20	SHAEFFER, J.R. et al. "Degradation of monoubiquitinated alpha-globin by 26S proteasomes"; Biochemistry, 34(12): 4015-21 (1995)
	C21	dos SANTOS, C.O. et al. "Expression of alpha-hemoglobin stabilizing protein gene during human erythropoiesis"; Exp Hematol, 32(2): 157-62 (2004)
	C22	SCOTT, M.D. et al. "Thalasaemic Erythrocytes: cellular suicide arising from iron and glutathione-dependent oxidation reactions?"; Br J Haematol., 91(4): 811-9 (1995)

EXAMINER'S	DATE	
SIGNATURE	 CONSIDERED	